Transferability and Priority Setting: A Taxonomy

This paper was produced by the Office of Health Economics and NICE International as part of the international Decision Support Initiative (www.idsihealth.org), a global initiative to support decision makers in priority-setting for universal health coverage. This work received funding support from Bill & Melinda Gates Foundation, the UK Department for International Development, and the Rockefeller Foundation.

June 2014

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1. Introduction

The International Decision Support Initiative (iDSI) project aims to support countries in priority setting as a means of moving towards sustainable universal health coverage (“UHC”), and to enable the potential transferability of aspects of priority setting work to be exploited to generate positive external benefits in other nations also seeking to move towards UHC. As mentioned by Glassman and Chalkidou (1), the importance of developing a priority setting process lies in the enormous impact that the resource allocation process has on the health condition of populations. If policy makers pay no attention to the cost-effectiveness during the process of resource allocation, the results could involve reaching less than one per cent of the total potential value of the health budget.

This document is an element of the iDSI. The objectives of this initiative are to launch priority-setting support in selected countries as well as create synergies across activities related to the used of evidence-informed and procedurally fair priority setting processes in healthcare. Health Technology Assessment (HTA) is seen as a key underpinning of such processes. As an element of iDSI, Objective 2 proposes to identity and analyse potential for economies of scale in the generation and application of clinical and economic evidence and due process to allocation decisions. In order to be able to fulfil this objective, it is crucial to define and relate to one another the most important concepts surrounded priority setting and HTA processes. Differences in understanding of the meaning of these concepts may inhibit dialogue and understanding about the transferability of analysis, processes and results in developing information based priority setting processes, as well as the extent of transferability of HTA assessments in the resource allocation and decision making process.

The primary target audience includes iDSI partners and funders, in the context of the project. This document also aims to reach a secondary target audience, the healthcare sector policy makers. In this sense, the expectation is that this document will be used as a tool in the decision making process.

This document is a review of definitions of concepts relevant to the use of priority setting processes based on HTA for the achievement of UHC. The objective is not to list isolated concepts and definitions, but to identify an economic framework which clarifies the relationship between these concepts.

2. Defining Universal Health Coverage (UHC)

The main concept to start with is Universal Health Coverage (UHC). According to the WHO (2), there are three dimensions which define the idea of the UHC inside any health care system:

1. **Who** should be covered? – the “breadth” of the system;

2. **What** should be covered? – the “width” of the system;

3. **How much** should it be covered? – the “depth” of the system.
UHC deals explicitly with this first question: coverage should be extended to every member of society. But UHC is typically treated as more than just a question of providing everyone with some level of coverage: the 2010 WHO report on UHC (3), in addition for calling for universal coverage, also argues that true UHC-compliant health systems should seek to minimise out of pocket spending, increase pre-payment for health services and pool risks between beneficiaries as far as possible.

We can view this broader, more substantive definition of UHC as suggesting an answer to the third question – as to the “depth” of the health care system. UHC should not only be universal, in the sense of covering everyone, but the coverage provided should be “deep” enough to provide individuals covered with the key risk sharing benefits of health insurance, avoiding the potentially crippling financial shocks which can be associated with buying health care out-of-pocket for even minor illnesses in the absence of a social safety net.

This leaves the second question: what types of services, products and technologies should a UHC system cover? This is the question which priority setting most directly attempts to answer by allocating a limited health budget to the areas which provide the most value in terms of health gain or other priorities of the decision maker, since the exact set of health technologies which a given nation ought to fund will be a function of its level of development, national characteristics and health funding and cannot and should not be pre-specified as a part of UHC.

Alongside the idea of the “width” of the system, is also included the idea of the quality of the healthcare provided. As mention by the WHO in its recent World Health Report (2), governments should decide not only which are the health priorities of their population, but also should be responsible to fulfil this demand with universally available, affordable, efficient, and good quality healthcare services. The WHO (2) also points out that health spending is not only an inherent good but one which tends to generate wider economic benefits by improving educational achievement and increasing productivity in the workplace and at home. Good quality in part relates to choice of technology and may involve a trade-off between cost and effect, but in the more general sense relates to the importance of the health care system having processes to ensure that, whichever technologies and services are provided as a result of the priority setting exercise, they are provided at a good quality, given the potential of those technologies and services to deliver health gain.

Having outlined the dimension of UHC, it is clear that the above three mentioned dimensions vary across countries and will depend on each country characteristics, such as culture, social preferences, structure of the healthcare system, income level, among others. Nevertheless, many nations recognise the necessity of establishing minimum health care standards to achieve. We can see elements of this approach in the 2010 WHO report (3), which calls for UHC systems to provide, at a minimum, coverage of “essential medicines” (though “essential” is not defined and is likely to be contingent on a nations’ needs and resources). It is important to recognise that Governments and others may differ in their meaning in the use of UHC according to the relative importance of the three dimensions, and use of terms like “essential” which pre-suppose some process of priority setting to identify what is “essential”.

Transferability and Priority-Setting
3. Priority Setting (PS)

As mentioned above, the meaning UHC for each country depends on the idea of who, what and how much should the healthcare system cover. Therefore, for UHC to deliver on its aspirations, deciding which services and policies are priorities is a critical first step. This will provide the tools that the policy makers need to answer the three questions surrounded the concept of UHC. Beyond the MDG-related measures, the draft WHO/WB (4) measurement framework provides guidance on broad disease control priorities, but it will be up to countries to set priorities for health spending to achieve UHC goals using a benefits “package”, guarantee or plan, or other instruments such as Essential Medicines Lists. By defining the “who” and the “what”, many have suggested that an entitlement is created that allows governments and citizens to hold health systems to greater levels of accountability and thus impact.

However, most discussion so far has concentrated more on technical ways of defining such lists or packages and much less on the processes for doing this. Seen through a local/national perspective, the scientific judgments and data requirements needed for deriving and maintaining such priority setting tools become themselves a lot more context-specific than one might think.

Many definitions have been established around the concept of priority setting. For instance, NHS Confederation defines priority setting as:

“the task of determining the priority to be assigned to a service, a service development or an individual patient at a given point in time. Prioritisation is needed because claims (whether needs or demands) on healthcare resources are greater than the resources available” (5)

WHO defines “priority setting” (albeit in the context of research) as:

“a programme to generate consensus about a core set of research issues that urgently require attention in order to facilitate policy development” (6)

The same report goes on to define “priority”, in this context as:

“a fact or condition that is judged to be more important than another” (emphasis in original), a process which, as the WHO acknowledges, is inherently value-based (6).

Essentially, priority setting (PS) is the process of ensuring that limited health budgets are allocated to the uses that have the greatest value. This could be a measure of societal value or value as relates to the decision maker’s preferences. In the case of this taxonomy value can be taken to refer to uses that contribute most directly to the UHC goals of any particular country. Making choices and decisions on what is to be subsidized, provided or covered is one way to narrow the gap between the capacity to produce and supply improvements in health care/technologies (which in turn depends on effective demand), the high potential demand for technologies that deliver health benefits, and the ability of societies to pay for them. We call this process of making (implicitly or explicitly) choices and weighing the trade-offs between the various options, priority-setting.

Priority setting can also be seen as supporting answers for any country as to the third UHC question, as to the depth of coverage as well as the second (as to the “width” of the system). Priority setting will be able to show what degree of coverage is consistent with the most value, taking into account
the value societies place on financial security and spreading the monetary risk of illness. Smith (23) set out a framework for doing this.

The form priority setting takes will depend on the structure of the health system and its underlying budgetary and fiscal arrangements. At the health system level, there are multiple mechanisms for setting (implicitly or explicitly) priorities for what gets funded, for whom and to what extent. Table 1 below lists several examples of mechanisms for effectively setting priorities for funding.

<table>
<thead>
<tr>
<th>Table 1</th>
<th>Priority Setting</th>
</tr>
</thead>
<tbody>
<tr>
<td><strong>Sheldon &amp; Maynard, 1993</strong> (7)</td>
<td></td>
</tr>
<tr>
<td>Clinical Discretion</td>
<td>Professional assessment of 'need' (benefit/risk ratio)</td>
</tr>
<tr>
<td>Competitive Market</td>
<td>Ability to pay at point of delivery</td>
</tr>
<tr>
<td>Insurance Market</td>
<td>Ability to pay for insurance employment status</td>
</tr>
<tr>
<td>Socialised Insurance</td>
<td>Entitlements</td>
</tr>
<tr>
<td>Implicit Rationing</td>
<td>Queuing, access barriers...</td>
</tr>
<tr>
<td>Explicit Rationing</td>
<td>Triage, reimbursement decisions</td>
</tr>
</tbody>
</table>

| **Klein, Day & Redmayne, 1996** (8)                  |                                                      |
| Denial                                              | Exclusion criteria (e.g. age limit for dialysis      |
| Selection                                           | Inclusion criteria (e.g. BMI for Orlistat)           |
| Deflection                                          | Cost shifting (e.g. first/second, health/social      |
| Deterrence                                          | Access barriers (e.g. co-payment)                    |
| Delay                                               | Waiting lists                                        |
| Dilution                                            | Reduce service quantity/quality for users            |
| Termination                                         | Premature cessation of service                       |

Sources: Sheldon & Maynard (7) and Klein, Day & Redmayne (9) taken from the CGD Report (1)

There are multiple dimensions and levels of priority-setting that frame resource allocation decisions. PS can be explicit or implicit. In the former case, the agents (i.e. the individuals who actually make the decisions) are known and accountable, and there are explicit methods and processes for weighing the trade-offs and for involving the various stakeholders. Positive and negative lists for surgical procedures or price controls and reimbursement regulations for drugs and devices belong (to a lesser or greater extent) to this first category. Such explicit resource allocation mechanisms can operate at different levels of the health system (central vs. provincial government level in the case of a publicly funded system); by geographic characteristics (e.g. urban vs. rural); by type of service (primary vs. hospital care); by population group (e.g. women and children; unemployed); by complexity (e.g. dialysis services or transplantation); by disease (e.g. infectious diseases) or technology (e.g. vaccines or pharmaceuticals), among others (see example presented in Figure 1).
On the other hand, implicit methods could be ad hoc, or may rely on semi-explicit strategies such as guidance/guidelines, peer benchmarking or oversight, or medical audit, devolving responsibility for the choices to the local insurer or provider level whilst, for example, imposing budgetary and/or regulatory/quality controls. Capitation systems at primary care level operate in this way with an explicit budgetary constraint in the presence (or not) of quality indicators and outcome metrics.

In defining explicit priority-setting, it is helpful to discuss what explicit priority-setting is not. **Explicit priority-setting is not:**

- **Cost control or cost cutting:** Through explicit and scientifically robust priority-setting, more resources can be released from ineffective technologies towards more effective ones or towards covering more people. Furthermore, PS can help make the case as to the need to increase spending on healthcare services and technologies by showing the value of what can be gained.

- **A technocratic exercise** carried out by expert modellers insulated from politics and social values: explicit priority-setting is as much about the methodology and data as it is about the process followed. Without a transparent, inclusive and independent process, the results of the priority-setting are unlikely to be adopted. Indeed, explicit priority-setting makes difficult decisions about trade-offs easier to defend.

- **Hidden de facto denial of access to needed services:** Priority-setting happens even when no one dares admit it does. Explicit priority-setting offers stakeholders a chance to review and debate the decisions and perhaps reverse them. The intent of the process is to replace “behind the scenes” advocacy and lobbying with explicit analysis and strong governance.

- **Promoting privatisation (or nationalisation!):** Priority-setting happens in one form or another in public, private and mixed systems. Explicit priority-setting can benefit all systems independent of their major funding source or type of provider. Priority-setting is a mechanism for public or private health care payers to identify what they want to buy and, potentially, where they want to buy it from, irrespective of ownership. How countries chose to finance and provide UHC is a separate question.

- **Introducing a reduced, minimal, safety net for the poor:** Priority-setting should not be about compromising the safety net made available for the poor. Explicit priority-setting can and does

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**Transparency and Priority-Setting**

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accommodate a strong equity component, which implicit rationing mechanisms omit, hence exacerbating inequalities and making it harder to target those in the greatest need.

While it is possible to highlight features of “better” or “worse” priority-setting processes, there is no universal, one-size-fits-all approach to carrying out explicit priority-setting for UHC. Every country will find its own solution that will necessarily evolve over time. Countries will design their processes and benefits packages based on their own values and political economy. There is, therefore, a need to: share experiences and showcase lessons learned; develop evaluation frameworks for priority-setting processes; and share technical, methodological and procedural know-how. Most importantly perhaps, there is a need to describe and articulate the value of Priority Setting as a necessary (but not sufficient) condition for attaining and sustaining UHC.

The key link between the questions arising from the three dimensions of UHC as to what to cover, how completely to cover it, and who to cover it for, is limited budgets. There are trade-offs along the three dimensions. Priority setting decisions as to the width of the system will impact on that ability to fund a system which is both broader and deeper – i.e. which covers more people more completely. Figure 2 provides an illustrative framework of the priority-setting process, and how some of the concepts described in this document relate to each other within this framework.
## Figure 2
Taxonomy of Priority Setting Process.

### Priority-setting

<table>
<thead>
<tr>
<th>Decision problem</th>
<th>Decision inputs</th>
<th>Decision point</th>
<th>Decision outputs</th>
<th>Downstream inputs</th>
<th>Outcomes</th>
</tr>
</thead>
<tbody>
<tr>
<td>Health sector</td>
<td>Health technology assessment</td>
<td>Decision point</td>
<td>Decision to be allocated in a certain way</td>
<td>Implementation</td>
<td>Objectives of resource allocation</td>
</tr>
<tr>
<td>Limited resources, requiring a decision on how these are to be allocated</td>
<td>Programme budgeting, Health technology assessment</td>
<td>Constraints (limits the range of available options)</td>
<td>LHC</td>
<td>LHC</td>
<td></td>
</tr>
</tbody>
</table>

### Cross-cutting characteristics of global public goods in priority-setting

- Easily and freely accessible
- Transferrable (can be successfully adapted to different contexts)
- Positive externalities
- Public goods (weakly non-rivalrous, weakly non-excludable)
Efficiency and Equity in Priority Setting

Up to this point we have mentioned two important concepts, the UHC and the priority setting, where the latter is referring to the process of making choices than ensures that the limited budget is allocated to the uses that contribute most directly to reach UHC. During this section the objective is to analyse the relationship between these two concepts and the degree of efficiency achieve by the healthcare sector.

In narrow economic terms, the objective of a priority setting process is to maximise the value of the outputs of the health system given available inputs (budgets, personnel, buildings and equipment) and available technologies to change these inputs into outputs in a particular time period. “Value” is defined broadly according to assessment criteria agreed by stakeholders. In economic terms, this is the same as saying that priority setting is equivalent to seeking both “allocative efficiency” and “technical efficiency”.

**Technical efficiency:** considers the question of how much health or related benefits we can produce with a fixed budget. The objective is to get as much health gain or related benefit as possible from the budget. This will give rise to a range of different combinations of health services that can be provided from the budget. These are technically efficient if it not possible to get more outcomes along one service dimension without losing some benefits along another dimension.

**Allocative efficiency:** considers the best (optimal) mix of health services to be provided given societal or decision maker preferences as to priorities. Allocative efficiency occurs when the mix of outcomes or outputs are such that no reallocation of money as between services can increase the value of health system outcomes.

Technical efficiency is not asking how much of health outcome to (see a more detail example in Annex 1), it is answering the more basic question: how much of each can we produce? Can we squeeze more health gain and related benefits out of our existing resources?

On the other hand, allocative efficiency is a matter of which combinations of health and related benefits society values more. In a situation in which, based on the allocation of the available resources, the healthcare sector has achieved allocative efficiency; it is not possible to improve on the priorities chosen, given our limited budget and level of technology (see a more detail example in Annex 1).

Why it is important to recognise the difference between allocative and technical efficiency for the priority setting process? Normally the objective of a priority setting process should be of ensuring allocative efficiency. As defined in section 3.3, priority setting is understood as the process of ensuring that limited health budgets are allocated to the uses that have the greatest value. Nevertheless, given the available resources, if the health system is producing at a point of under its possibilities, priority setting may also have to address questions of technical efficiency. This will especially be the case if tackling inefficiency in the health system requires investment – for example, building new facilities or better training for health care professionals. In effect, there is likely to be a dynamic aspect to priority setting – achieving more health gain in the future may require diverting resources at the present time to enable technical efficiency to be improved, or to expand the health
system and/or the technologies available to it. Of course, some improvements in technical efficiency can be achieved without adding to cost (for example by discontinuing the provision of services that evidence suggests do not deliver any health gain, or which have been superseded by technologies that deliver more health gain at lower cost) and others, such as service reorganisation to improve efficiency, may pay for themselves in terms of cost savings. However, priority setting as part of UHC is likely in practice to involve not only choices about the mixes of treatments and services to be provided now, but also trade-offs as between providing fewer additional services today in order to invest in improving the efficiency of the health system or expanding the health system, both of which should enable more priorities to be met in the future.

Having outlined the concepts of technically efficiency and allocative efficiency, we can introduce the link between these and the concept of equity. Equity is an important objective for healthcare sector policy makers in most countries. As mentioned by Cuyler and Wagstaff (9) equity in healthcare can be understood from different angles: 1) equity of expenditures per-capita, 2) distribution according to the needs, 3) equality of access, and 4) equality of health. However, the importance of each one of these dimensions depends on the social preferences, which are close related to the culture and characteristics of each country. Therefore, as mentioned by Culyer (10), equity and efficiency are not necessarily at odds, an efficient allocation of health care, and therefore health care spending, must be efficient given everything a society cares about. So it is meaningless to say that a given set of health care priorities maximises the value of what is produced, but that it is nonetheless undesirable since it is inequitable, because any meaningful notion of “value” should already capture our collective beliefs about equity.

Nevertheless, the difficulty of approximating a social welfare function which reflects social preferences, including about equity, has proven to be an obstacle to achieving the preferred mix of health gain and reduced inequality of health. Recently, a number of efforts have been undertaken to establish formal methodologies to consider, during resources allocation process in the health sector, the importance of equity in social preferences. For instance, Asaria et al. (11) compare four different interventions by modifying the commonly used cost-effectiveness analysis (CEA) to include the concept of health inequality; they call this new approach the distributional cost-effectiveness analysis (DCEA). The authors take into consideration that societies can differ in what they judge is a fair variation in health status. For instance, the extent of variation in health status depending on ethnic diversity considered fair or unavoidable will vary by society. The results suggest that the selection of health interventions based on CEA differs from the selection based on the DCEA (11).

Another example is the methodology proposed by Verguet et al. (12). This is also a modification of CEA, but in this case the analysis takes into consideration the effect of an intervention on the level of protection against financial risks and on the distribution of health.

Notwithstanding problems in the determination of social preferences in relation to tackling health inequalities, the commitment to equity is an essential part of the path to the UHC, given that it is vital to avoid that the poorest members of the society fall behind (13), and must be considered during the allocation of health budgets. As mentioned above, the priority setting process seeks to ensure that limited resources are allocated to the uses that have the greatest value. In other words, allocative efficiency is normally the objective of the priority setting process and depends on the social preferences, consequently; it is possible to say that the achievement of equity falls under the achievement of allocative efficiency. So the development of a priority setting process will be also
linked to the development of a definition of equity for each country as well as the inclusion in the decision making process and the subsequent decrease in inequality.

Furthermore, development of a priority setting process is unavoidably linked with the increase of consultation/participation of civil society, thus having a positive effect in another dimension of equity apart from the health status. This relates to a more fundamental point about the need for any approach to priority setting to involve a fair process, which may be easier to establish than agreeing a set of principles (14).

Priority Setting and HTA

In this section the concept of HTA is defined and its role in supporting priority setting discussed. We will begin by setting out a range of definitions of HTA:

The iDSI Proposal

We use Health Technology Assessment in the broadest sense of the term, to include drugs and devices, diagnostic tests, surgical interventions and services, both preventative and curative/palliative, as well as service delivery models and programmatic reforms, as well as health and public policy interventions, spanning the continuum of social and health (clinical and public) policy.

EUnetHTA Definition

“Health technology is the application of scientific knowledge in health care and prevention”. (15)

“Health technology assessment is a multidisciplinary process that summarises information about the medical, social, economic and ethical issues related to the use of a health technology in a systematic, transparent, unbiased, robust manner. Its aim is to inform the formulation of safe, effective, health policies that are patient focused and seek to achieve best value. Despite its policy goals, HTA must always be firmly rooted in research and the scientific method”. (15)

Examples of Health Technology:

- Diagnostic and treatment methods
- Medical equipment
- Pharmaceuticals
- Rehabilitation and prevention methods
- Organisational and supportive systems within which health care is provided

HTAi Definition

“Health technology assessment is a field of scientific research to inform policy and clinical decision-making around the introduction and diffusion of health technologies”. (16)

“Health technologies include pharmaceuticals, devices, diagnostics and treatments, and other clinical, public health, and organizational interventions. HTA is a multidisciplinary field
that addresses the health impacts of technology, considering its specific healthcare context as well as available alternatives. Contextual factors addressed by HTA include economic, organizational, social, and ethical impacts. The scope and methods of HTA may be adapted to respond to the policy needs of a particular health system”. (16)

INAHTA Definition

“Health technology is an intervention that may be used to promote health, to prevent, diagnose or treat acute or chronic disease, or for rehabilitation”. (17)

“Health technology assessment is the systematic evaluation of the properties and effects of a health technology, addressing the direct and intended effects of this technology, as well as its indirect and unintended consequences, and aimed mainly at informing decision making regarding health technologies. HTA is conducted by interdisciplinary groups that use explicit analytical frameworks drawing on a variety of methods”. (17)

Each of these definitions raises the question as to whether HTA should be restricted to consideration of individual products or services and to clinical guidelines (which we can characterise as combinations of individual technologies or services) or whether the concept should also be extended to cover the assessment of characteristics of the architecture of the health system as a whole, which is referred to in the above definitions as “service delivery models and programmatic reforms”, “organizational interventions”, and the “organisational and supportive systems within which health care is provided”. We have previously referred to this distinction as “micro-HTA” (around individual technologies and combinations of technologies) and “macro-HTA” (around the organisational forms and incentives that are used to shape the health system within which individual technologies are used and clinical guidelines applied) (18).

While the definitions provided above clearly do not restrict HTA to individual technology decisions, it is the case internationally that the common usage of “HTA” is to refer only to smaller scale “micro” questions— and in particular coverage and reimbursement policies as part of a UHC policy, while issues of health system structure are referred to using a variety of different terms, such as health services research, or health systems research. We intend to include in iDSI both HTA in the narrower sense of the term of assessing drugs and devices, diagnostic tests, surgical interventions and services, both preventative and curative/palliative, and HTA in the wider sense of the term. This is often called health system research and involves assessing, when relevant to priority setting or for other decision making: service delivery models and programmatic reforms; and health and public policy interventions, spanning the continuum of social and health (clinical and public) policy.

The other key distinction we need to draw is between Health Technology Assessment, the process defined above, and Health Technology Appraisal (which unhelpfully share an acronym with the process of assessment, and the terms are often used interchangeably if incorrectly). As noted above, Health Technology Assessment is an evaluative process that yields a summary of the relevant information about a product. Appraisal, on the other hand, leads to a decision in relation to the product in question, based on the information produced by an appraisal. We can view HTA as one of a range of potential inputs into this process – HTA generates assessments of health technologies for either a narrow or broad definition of “technology”, while priority setting uses data from assessments, assessment criteria and an awareness of the target audience to arrive at a decision as
to relative value and therefore the optimal level of funding. This would mean that health technology assessment (HTA) is a support to priority setting, whilst health technology appraisal, as distinct from assessment, is part of priority setting.

How HTA is used to support priority setting decision making is a key part of the iDSI project. Thus we are considering the transferability of knowledge not only about individual products and services but about the processes of using HTA as part of a priority-setting process.

Based on the discussion above, we suggest the following synthesis of these definitions, drawing what we take to be the key aspects from each and focusing on operational aspects:

We use Health Technology Assessment as an evaluative process and structured analysis of health care technologies in the broadest sense of the term, to include:

- drugs and devices, diagnostic tests, surgical interventions and services, both preventative and curative/palliative (often performed for the purpose of providing input into regulatory, coverage/formulary (including essential medicines lists), and/or reimbursement policy decisions).
- service delivery models and programmatic reforms, as well as health and public policy interventions, spanning the continuum of social and health (clinical and public) policy.

HTA in this broad sense is a key input to priority setting as part of UHC decision making.

With regard to the technical and allocative efficiency, mentioned in the previous subsection, it is worth noting that HTA, as a tool for evaluating a technology, can be used to improve both technical and allocative efficiency. When HTA reveals a treatment is ineffective or is dominated by another (more health gain at a lower cost) then technical efficiency is improved. In most cases, however, HTA results suggest that one technology produces more benefit but at a greater cost. In this case priority setting decisions are needed to determine if the extra benefit is worth the extra cost. Such a judgement will in part depend on the nature of the health gain (for example, how severe is the disease in which the gain is achieved) and also on the opportunity cost (what sort of health gain could be obtained by using the money for other priorities?). This is about achieving allocative efficiency – choosing the mix of interventions that give the greatest value from UHC funding.

4. Sample Q&A of Decision Makers on ‘why HTA for UHC?’

As mentioned in the introduction, the secondary target audience of this document are policy makers. With this in mind, this section aims to answer the main questions that policy makers have regarding the importance and relationship between HTA and UHC. This will be done based on the definitions mentioned above, but from the policy makers’ point of view.

1. What does HTA mean?

HTA is both a set of technical tools as well as a policy process. It aims to assess health benefits, value for money, feasibility, social and ethical concerns, and other policy considerations regarding the introduction of health interventions and technologies. As HTA aims to inform policy decisions, it
underlines participatory, transparent, and other elements that will make evidence generated more acceptable for stakeholders and defendable by decision makers.

2. How does HTA relate to UHC?

The World Health Organization (WHO) defines UHC as a means to ensure that all people can use the promotive, preventive, curative, rehabilitative and palliative health services they need, of sufficient quality to be effective, while also ensuring that the use of these services does not expose the user to financial hardship. By this definition, UHC needs to determine the effective services that people need through the subsidization of financial costs. As a result, these prioritized services must be feasible and sustainable. HTA fits into UHC by proving evidence that helps governments prioritize services.

3. When should HTA be introduced during the development of UHC?

Recognizing UHC as a dynamic process, HTA can be introduced at any stage, but the earlier, the better. Referring to WHO’s three dimensions to consider when moving toward UHC, HTA can help inform the kinds of services that should be included under UHC (width), for whom (breadth), and how important the respective services are to UHC (depth – the more important, the less financial barriers there should be). In many countries that develop UHC, countries need to introduce UHC step-by-step by thinking about which groups of people to include, which services to start introducing, how to finance the services in order to reduce financial barriers, etc. These kinds of questions will need to be addressed again and again throughout the UHC development and HTA can be helpful to ensure systematic thinking. For countries with a developed UHC but without HTA, HTA is needed because at a certain point, the country will not be able to support providing every kind of service for the population because of financial barriers.

4. If I am interested in introducing HTA, how do I make a start and where do I find sources of support?

At the outset, the country needs a committed group of people to generate (technical groups) and make use of evidence (decision makers) to inform policy decisions. These groups should be willing to work with stakeholders under a code of conduct to ensure transparency and evidence-based decisions. There are a number of professional associations promoting the use of HTA, such as Health Technology Assessment international, International Society for Pharmacoeconomics and Outcomes Research as well as universities providing post-graduate education related to HTA. However, there are only a few organizations that offer in-country services and hands-on collaboration, such as NICE International and HITAP. As a result, the Bill and Melinda Gates Foundation (BMGF), Department for International Development (DFID), and with support from the Rockefeller Foundation, initiated the international decision support initiative (iDSI) with the aim to bring together partners to develop a systematic way of providing in-country support and ensure economies of scale.
5. Transferability, Externalities and Public Goods

It is worth highlighting the associations between the concepts defined up to this point. On the path to UHC, it is necessary to have a process that allows that the maximization of health outcomes and related benefits given inputs/resources and social preferences. We call this the priority setting process. HTA, a structured assessment of health technologies under consideration in the priority setting process for inclusion in UHC, can bring evidence and transparency to the priority setting process.

Several factors could affect the cost and effectiveness of developing and operating a priority setting process. One important concept is that of a public good. This leads to a discussion of the concept of “transferability” in HTA and in priority setting processes and institutional arrangements.

Defining Public Goods

“Public goods” have two defining characteristics:

1. They are non-rivalrous in consumption, meaning that an increase in the number of people making use of the good does not impose any cost on producers or existing consumers.
2. They are non-excludable, meaning that it is impossible to prevent additional people from obtaining the benefits of the good, regardless of whether they have paid to access it.

Some goods which would generally be considered to have public good characteristics might fail to meet these two definitions in full. We can imagine slightly weaker forms of the non-rival condition, which would include goods for which additional users impose small but non-zero costs on existing users or producers. For example, medical advice intended for a wider audience might be less specific, and so less useful to some patients than advice aimed only at a particular patient sub-population. We could also slightly weaken the non-excludability condition, so as to include goods which can be excluded but at a relatively high cost to existing users or producers. This slightly broader definition of public goods is probably more helpful than the “pure” definition.

We can make a couple of relevant observations at this stage. The first is that informational goods are automatically non-rivalrous, unless their value arises from asymmetry of information (e.g., stock tips are rivalrous, since their benefits come from having access to information which others do not), or if they are so specific in nature as to render them useless to all other potential consumers (it would not make sense to refer to a person’s shopping list as non-rival, even though it satisfied the technical condition above, since no one else could practically benefit from it).

Second, informational goods are not necessarily non-excludable. Excluding access to information may be difficult, or expensive relative to the value of the information, but it is not likely to be impossible. As a result, useful information will be a public good where its owner does not want to or does not succeed in excluding non-paying customers.

A related concept is that of global public goods. According to The World Bank, a global public good is a public good that has a spatial dimension, meaning a cross-border nature (19). WHO, for its part, defines global public good as a public good whose benefits flow to more than one country at no
extra cost and no country can effectively be denied access to those benefits (20). We can see that this is a straightforward international extension of our amended definition of public goods.

**Defining Externalities**

Positive externalities arise where people other than the parties to a transaction derive a benefit from it. While all public goods generate positive externalities, because non-paying users cannot be excluded and do not harm producers or any paying consumers, not all externalities are public goods. For example, in the case of a bee-keeper whose bees pollinate the fruit trees of the nearby orchard, the beneficiaries of the positive externality are a narrowly-defined group, rather than the public in general.

The term “spillovers” is often used in a non-technical sense that is broadly analogous to positive externalities. We might think of spillovers as referring only to externalities where the beneficiaries are some narrower nearby group, rather than the public as a whole. This would have the advantage of dividing positive externalities into two classes: “public goods”, where the benefit is relatively universal, and “spillovers”, where the benefit accrues to a relatively small group. So fruit growers receive “spillovers” from bee-keepers, but the community receives a public good from a public sculpture. Both cases are examples of different kinds of public externality.

For our purposes, it is important to highlight that:

**Any investment which generates positive externalities, including public goods and spillovers, will tend to be under-supplied by the market, because its benefits are not fully internalised.**

In other words, it is expected that the level of production of public goods and spillovers under market conditions, without government intervention, not fulfil the demand, because the direct benefit gained by the producers at the margin (which determines how much they supply) is only part of all the potential benefit derived from the marginal production.

So there is a prima facie case for additional investment in goods that generate positive externalities, which by definition includes any and all public goods. If investments in HTA and/or priority setting processes and institutional arrangements can be shown to have public good characteristics, then investments in HTA and in priority setting will be justified, over and above the point where local benefits equal local costs.

At this point, it is worth to mention the relationship between global public goods and externalities. Based on the discussion above, a positive externality that could potentially benefit more than one country, without the possibly to prevent others countries from accessing the benefit, should be considered a global public good.

Applying these principles we conclude that the outputs of priority setting processes and institutional arrangements, and of HTA will have (global) public good characteristics when they are both:

1. **made easily and freely accessible to potential beneficiary nations/states and**
2. when they contain information which is potentially relevant and of value to others: when they are transferable. We consider and attempt to define this concept of transferability immediately below.

Defining “Transferability”

We begin by following Drummond et al. (21) in drawing a distinction between “generalizable” decisions, which can be applied directly in other jurisdictions, and those which are merely “transferable”, which ought not to be applied directly but which can be successfully adapted to different contexts. Clearly generalizability is a significantly higher standard than transferability, so that distinguishing transferable decisions from generalizable ones will require additional knowledge of the decision making process and its inputs.

Neither generalizability nor transferability can be assumed, even between similar nations. A 2008 ISPOR taskforce review of transferability found that:

“The extent of variation in estimates has been shown in a review of economic evaluations of medicines undertaken in Western Europe. It was found that, in 17 out of 27 cases, the variation in the estimates of the incremental cost-effectiveness ratios could be considered to be substantial (a twofold difference likely to change the decision to reimburse the drug)”. (21)

Clearly, then, evidence suggests there can be significant differences between nations in respect of the efficacy and cost-effectiveness of health technologies, or in the emphasis they place on different elements of value. Transferability involves a consideration of what these differences might be, how significant they are, how they can be measured and how and whether decisions can be adapted to take them into account.

By considering transferability as a question of inputs to decisions, rather than decisions themselves, we can increase our opportunities for making aspects of local priority setting an even greater global public good.

The next issue we might consider is the scope we give to concept of “decisions” in transferability. Obviously transferability can function in relation to individual health technologies, but transferability can also apply to larger scale priority setting questions, such as the decision to allocate funds between structural elements of the health care system, including decisions about how to fund and carry out HTA itself and to priority setting processes and institutions.

So, we have suggested a definition of transferability which broadens it in three key ways:

1. we can transfer inputs (data, evidence reviews and models) as well as outputs (decisions) and
2. we can transfer inputs (data, evidence reviews and models) and decisions in relation to big questions (what should the health system look like?) as well as small (should we approve this drug?).
3. we can transfer process and institutional arrangements for carrying out HTA and priority setting.
The next issue we wish to consider is the scale of barriers to transferability, and when transfer rather than replication will be optimal. The argument has been made (Barnsley et al., 2014 forthcoming) that the question of when transfer of priority setting is optimal is best seen through the lens of value of information theory: Replicating HTA or a priority setting exercise which has already been conducted elsewhere is valuable only if the costs of doing so are outweighed by the expected value of the improved decision making accuracy provided by repeating the exercise specifically for local conditions. Given that local evidence generation and HTA processes are likely to be resource intensive and their findings subject to a degree of uncertainty, using evidence from elsewhere is likely to be more attractive than traditional approaches in the transferability and generalizability literature suggest. The same may be true of priority-setting processes and institutional arrangements, although health system context and the need for local ownership are likely to be very important.

**Economies of Scale and Increasing Returns to Scale**

An additional argument for concentrating at least some forms of priority setting research in particular areas is that such specialisation may yield internal or external economies of scale.

*Economies of scale:* methods of production where a proportional increase in output can be achieved at a less than proportional increase in input costs.

*Increasing returns to scale:* It is a related but distinct concept, referring to methods of production where a proportional increase in production can be achieved using a less than proportional increase in inputs.

These terms can be used interchangeably when input prices are fixed across the relevant range of outputs under consideration.

For our purposes we are concerned only with the costs of producing a given amount of valuable information, and therefore only with economies of scale. We note, however, that these costs should be calculated according to the underlying social value of the inputs to production (their “shadow price”). Additionally, we are interested not in increasing the “volume” of output according to some arbitrary metric (number of decisions, megabytes of data) but their value in terms of the impact on decision making. The key point to note is that the existence of economies of scale should be measured on the basis of the global value of output, recognising actual levels of decision adoption by other nations, as well as the domestic value of what is produced. If increasing the scale of priority setting or use of HTA in one nation encourages other nations to adopt those decisions or use the HTA evidence generated rather than seeking to replicate them, this will tend to lead to economies of scale provided a global perspective is taken.

Economists also divide economies of scale in “internal” economies, which accrue to individual organisations as they grow larger, and “external” economies, which accrue to entire sectors as a result of factors such as network effects, serendipitous communication between companies’ and employees development of specialised input providers. For instance, internal economies of scale have led to the creation of large hospitals. In relation to external economies of scale, the emergence of regional networks and organizations related to priority setting could reduce the costs of producing the information needed by the policy makers. Moreover, the creation of a priority setting
network with sufficient members could facilitate to build institutional capacity for priority-setting at technical level, by offering training and organizing seminar/conferences, which in turn will facilitate the transferability of information.

iDSI ideally hopes to achieve economies of scale in both these forms. If the project is successful individual decision making units within a country will achieve a kind of “critical mass” enabling them to share expertise and benefit from experience internally, while also propagating the lessons learned in any one section of the health system to other bodies via knowledge and ultimately staff transfer (e.g. HITAP Thailand staff training people in Myanmar who in turn then go on to train staff elsewhere), so achieving external economies of scale.

It is possible that, even if investments in priority setting in one country do not produce global goods (because the outputs are too nation-specific to be transferable, for example), they could generate purely domestic internal or external economies of scale. It could be the case that once a nation has a foundation in priority setting and/or HTA it can expand those activities relatively cheaply while still producing significant benefits in terms of the value of health care produced. If the outputs of priority setting are both transferable global public goods and, separately, can be produced more efficiently at a larger scale (exploiting internal economies of scale) then this is a very strong argument for supporting the development of regional specialists in priority setting.

6. Conclusions

Priority setting helps nations seeking to implement UHC a tool to use their limited health care resources to produce the best value health services possible given their objectives. It is therefore a tool to achieving greater allocative and technical efficiency. HTA represents an important input into the priority setting process, by providing a powerful tool for answering questions about technical efficiency and allocative efficiency.

The outputs of priority setting in one country will be global public goods if they are made freely available to other nations and if they are relevant and useful to those nations’ circumstances. This is a question of “transferability” and we expect that outside data can be valuable in a very wide range of circumstances.

Finally, economies of scale will provide a further justification for building priority setting capacity in selected nations in some situations.
Annex 1. Technical and Allocative Efficiency Illustrative Example

In order to understand the relationship between these two economic concepts in the context of priority setting and UHC, it is necessary to introduce a third concept broadly used in economics: the Production Possibility Frontier. A Production Possibility Frontier is a graphical illustration that shows the maximal combinations of outcomes that can be produced (in this illustrative case from two goods) during a specific time period given fixed resources and fixed technology and making full and efficient use of available factor resources. It shows what could be produced if the health system was technically efficient. The red line showed in Figure 3 represents a Production Possibility Frontier.

Figure 3
Technical efficiency and Allocative efficiency

Figure 3 shows a simplification of the reality in which all health outcomes the health system of a hypothetical country produces are split into two: X and Y. Point A in Figure 3 represents a situation which is not optimal. It is not technically efficient. The country can better organise its health system to produce a higher level of both X and Y, with the available inputs and technologies. On the other hand, point B represents a level of production of health outcomes that is impossible to reach with the current level of technology and inputs. The third point, C, is on the Production Possibility Frontier, this means that the health system is producing in a maximum level of technical efficiency given its possibilities.

Technical efficiency is therefore not asking how much of health outcome X and how much of health outcome Y to produce (Figure 3), it is answering the more basic question: how much of each can we produce? Can we squeeze more value out of our existing resources?

Allocative efficiency is a matter of which combinations of health and related benefits society values more. In order to explain this concept is necessary to define the Social Indifference Curve, which we can take as being determined by a decision maker on behalf of the beneficiaries of the health system. These are combinations of the two health outcomes that yield equal satisfaction, utility or welfare to the decision maker acting on behalf of society. In Figure 3 two of these Social Indifference Curves are illustrated: a blue straight line and a blue dot line. Each one of these lines is associated with a unique level of health outcomes and therefore social welfare. It is easy to observe that along the blue dot line all levels of outcomes are below the levels of outcomes associated with the blue
straight line. Society prefers to operate its health system at a point on the straight line than on the dot line, meaning that it achieves more of both outcomes.

We can now observe that, even when point C in Figure 3 is a technical efficiency point, it is not the one that maximizes the social welfare as defined by the decision maker, and thus, it is not the one that maximizes the allocative efficiency. If we are at a point of allocative efficiency, any attempt to produce more of one health outcome implies that we will have to give up an amount of another health outcome which society values even more. Point D represents the level in which the health system has reached the maximum technical efficiency and the maximum allocative efficiency. So we have correctly organised and prioritised health services to provide the outcomes valued most. We cannot improve on the priorities chosen, given our limited budget and level of technology.
Annex 2. Glossary of Main Concepts

Appropriateness:

“Most definitions of appropriateness address a number of key requirements: that care is effective (based on valid evidence); efficient (cost-effectiveness); and consistent with the ethical principles and preferences of the relevant individual, community or society. The priorities given to each of these dimensions vary in different populations”. (22)

Clinical (practice) Guideline:

“A systematically developed statement to assist practitioner and patient decisions about appropriate health care for one or more specific clinical circumstances. The development of clinical practice guidelines can be considered to be a particular type of HTA; or, it can be considered to be one of the types of policymaking that is informed or supported by HTA”. (23)

Clinical Effectiveness:

“The extent to which a specific intervention, procedure, regimen, or service does what it is intended to do under ordinary circumstances, rather than controlled conditions. Or more specifically, the evaluation of benefit to risk of an intervention, in a standard clinical setting, using outcomes measuring issues of importance to patients (e.g. ability to do daily activities, longer life, etc.)”. (23)

Clinical Pathway:

“This usually refers to the sequence of practices, procedures and treatments that should be used with people with a particular condition. The aim is to improve the quality of care. It is sometimes also known as a ‘care pathway’”. (24)

Comparative Effectiveness:

“Comparative effectiveness research is the generation and synthesis of evidence that compares the benefits and harms of alternative methods to prevent, diagnose, treat, and monitor a clinical condition or to improve the delivery of care. The purpose of CER is to assist consumers, clinicians, purchasers, and policy makers to make informed decisions that will improve health care at both the individual and population levels”. (25)

Consensus Development:

“Various forms of group judgment in which a group (or panel) of experts interacts in assessing an intervention and formulating findings by vote or other process of reaching general agreement”. (23)

Cost Benefit Analysis:

“A comparison of alternative interventions in which costs and outcomes are quantified in common monetary units”. (23)
Cost Utility Analysis:

“A form of cost-effectiveness analysis of alternative interventions in which costs are measured in monetary units and outcomes are measured in terms of their utility, usually to the patient, e.g. using QALYs”. (23)

Cost-consequence Analysis:

“A form of cost-effectiveness analysis in which the components of incremental costs (of therapies, hospitalization, etc.) and consequences (health outcomes, adverse effects, etc.) of alternative interventions or programs are computed and displayed, without aggregating these results (e.g. into a cost-effectiveness ratio)”. (23)

Cost-effectiveness Analysis:

“A comparison of alternative interventions in which costs are measured in monetary units and outcomes are measured in nonmonetary units, e.g. reduced mortality or morbidity”. (23)

Cost-minimisation Analysis:

“A type of economic assessment that considers the costs and effects of at least two types of interventions where the effects are found to be, or can be assumed to be, the same or not significantly different”. (26)

Decision Analysis:

“An approach to decision making under conditions of uncertainty that involves modelling of the sequences or pathways of multiple possible strategies (e.g. of diagnosis and treatment for a particular clinical problem) to determine which is optimal. It is based upon available estimates (drawn from the literature or from experts) of the probabilities that certain events and outcomes will occur and the values of the outcomes that would result from each strategy”. (23)

Economic Evaluation:

“The comparative analysis of alternative courses of action, in terms of their costs and consequences”. (23)

Effectiveness:

“A measure similar to efficacy except that it refers to the effect of a particular medical technology or procedure on outcomes when used in ‘actual’ practice. It thus differs from efficacy in that efficacy concerns only the technical relationship between the procedure and its effects under ‘ideal’ or experimental conditions (in practice, typically the conditions that obtain in a research-oriented teaching hospital or primary care practice). ‘Actual’ practice is thus conceived to be practice as conducted by average professionals working with average resources”. (27)
Efficiency:

“In a restrictive sense, efficiency is defined either as minimizing the opportunity cost of attaining a given output or as maximizing the output for a given opportunity cost. The general term used by economists is Pareto-efficiency. This is an allocation of resources such that it is not possible to reallocate any of them without imposing uncompensated losses of utility on some individual. A variant is potential Pareto-efficiency, where it is not possible to reallocate resources without imposing non-compensable losses on someone. It is common to see the notion of efficiency expressed at three different levels: technical efficiency, where no more inputs are used than are technically necessary to attain a given output; cost-efficiency or cost-effectiveness, where a given output is produced using the least-cost technically efficient combination of inputs or, conversely, output is maximized for a given level of cost; Pareto-efficiency, where output is not only technically efficient and cost-effective but is also set at a rate such that any diminution or increase would cause marginal cost to exceed or fall below the marginal value to consumers. Pareto-efficiency is also termed ‘allocative efficiency’. The first two ideas concern the allocation of inputs to outputs; the third concerns the allocation of outputs to consumers, clients or users.

A variant idea of efficiency arises under what is known as extra-welfarism. With this (rather than general utility or welfare) as the framework, the ‘maximand’ may be whatever the analyst or policy-maker selects as appropriate. In health policy, health or health gain are common objectives. In such cases, health may be set as the ‘maximand’ and efficiency implies either achieving a given overall level of health in the population at the least opportunity cost or, for a given set of resources, maximizing their impact on overall health. The idea of ‘overall’ health implies, of course, some means of ‘adding up’ the health of individual people, which will entail some distributional value judgments concerning the weight each is to have”. (27).

Essential Medicines:

“Essential medicines are those that satisfy the priority health care needs of the population. They are selected with due regard to public health relevance, evidence on efficacy and safety, and comparative cost-effectiveness”. (28)

Evidence-Based:

“Evidence based medicine is the conscientious, explicit, and judicious use of current best evidence in making decisions about the care of individual patients. The practice of evidence based medicine means integrating individual clinical expertise with the best available external clinical evidence from systematic research. Evidence-based medicine asks questions, finds and appraises the relevant data, and harnesses that information for everyday clinical practice”. (29)

External Effect:

“External effects relate to the consequences of an action by one individual or group as they have an impact on others. There may be external costs and external benefits. Some are pecuniary, affecting only the value of other resources (as when a new innovation makes a
previously valuable resource obsolete); some are technological, physically affecting other people (communicable disease is a classic example of this type of - negative - externality; network externality is another kind, referring to any change in the physical benefit that an agent derives from a good when the number of other agents consuming the same kind of good changes; antimicrobial resistance is another; herd immunity from vaccination is a positive example); some are utility effects that impinge on the subjective values of others (as when, for example, one person feels sympathy and distress at the sickness of another, or relief at their recovery). This latter is sometimes known as a caring externality (Culyer, 1976). When there are beneficial externalities of this kind, the standard maximizing behaviour assumed for individuals may not result in a Pareto optimum, notably if the marginal benefit received by the caring person is larger than the net marginal cost of the good or service to the consumer (that is, the marginal cost less the marginal value to the consumer)". (27)

Health Information Exchange (HIE):

"Electronic movement of health-related information among organizations according to nationally recognized standards. The goal of health information exchange is to facilitate access to and retrieval of clinical data to provide safer, timelier, efficient, effective, equitable, patient-centered care. Health information exchange organizations (HIOs) provide the capability to electronically move clinical information between disparate health care information systems while maintaining the meaning of the information being exchanged. HIOs also provide the infrastructure for secondary use of clinical data for purposes such as public health, clinical, biomedical, and consumer health informatics research as well as institution and provider quality assessment and improvement. Most HIOs currently are regional health information organizations (RHIOs)". (30)

Health System Research:

"The people, institutions, and activities whose primary purpose is to generate high quality knowledge that can be used to promote, restore, and or maintain the health status of populations. It can include the mechanisms adopted to encourage the utilization of research. Health research systems overlap to some extent with health systems and other research systems. It is important to note that although boundaries may not be clear, it is important to discuss what national health research systems include at a particular point in time. Such concrete definitions are required to describe and analyse what is considered as health research, (i.e., the topics covered), who is doing health research (i.e., institutions and individuals), who are the research users (i.e., policy makers, communities, donors) and how much does health research cost (i.e., funding flows and allocation)". (31)

Health Technology Assessment (HTA):

"HTA usually addresses the following questions: does the technology in question work? For whom does it work? How well does it work? At what cost does it work? How does it compare with other technologies deemed to be suitable comparators? It generally uses insights from economics, epidemiology and biostatistics. Cf. cost-effectiveness analysis, cost-utility analysis, decision analysis". (27)
Multiple-criteria decision analysis (MCDA):

“A technique (often abbreviated as MCDA), akin to cost-effectiveness analysis (CEA), for helping decision makers to take decisions. It differs from CEA by explicitly helping decision makers to consider factors beyond standard welfare or health maximization which, with CEA, are generally treated in a somewhat ad hoc manner”. (27)

Operations research:

“Operational research aims to develop solutions to current operational problems of specific health programmes or specific service delivery components of the health system, e.g., a health district or a hospital. This research is characterized by a strong problem-solving focus and an urgency to find solutions. Its demand-driven nature and close association with health care delivery and routine health care operations ensure operational relevance of the research activities and rapid uptake and local utilization of research findings. A wide range of study designs and research methods are used, ranging from descriptive and analytical studies to operational experiments and the use of mathematical modelling. The research often starts with exploratory studies to better define the problem and its determinants, and to identify potential solutions that can subsequently be tested under operational conditions”. (32)

Outcomes Research:

“Evaluates the impact of health care on the health outcomes of patients and populations. It may also include evaluation of economic impacts linked to health outcomes, such as cost effectiveness and cost utility. Outcomes research emphasizes health problem- (or disease-) oriented evaluations of care delivered in general, real-world settings; multidisciplinary teams; and a wide range of outcomes, including mortality, morbidity, functional status, mental well-being, and other aspects of health related quality of life. It may entail any in a range of primary data collection methods and synthesis methods that combine data from primary studies”. (23)

Priority Setting:

“Ordering possible health care interventions, social care interventions, general health policies or strategies in such a way that those that ought most to be chosen are ranked at the top. Decision analysis, heath technology assessment (HTA), cost-effectiveness analysis (CEA) and multi-criteria decision analysis (MCDA) are common components of priority-setting processes, which are then usually supplemented by further considerations, for example, of equity and budgetary impact”. (27)

Protocol:

“The plan or set of steps to be followed in a study. A protocol for a systematic review should describe the rationale for the review; the objectives; and the methods that will be used to locate, select and critically appraise studies, and to collect and analyse data from the included studies”. (23)
Public Good:

“A good or service that it is not possible to exclude people from consuming once any is produced. Clean air is a classic example and clean water another, though one could be avoided by migration to an urban environment and the other by holidaying in resorts with clean beaches and water. Public goods are non-rival in the sense that providing more for one person does not entail the other having any less (the marginal opportunity cost of provision to another consumer is zero). Most public goods are not wholly public in this sense and whether health care itself has significant public good characteristics is a point of debate. Some programmes (especially those called ‘public health’) have considerable public good characteristics and even the care consumed by an individual may have a public aspect by virtue of any ‘sympathy’ that others may feel, so the consumption of one may in this way affect the utility of many others. Thus, if the alleviation of someone’s ill-health is valued by any other than that individual, and there is more than one such externally affected person, then the externality will have the attribute of publicness”. (27)

Quality Assessment:

“A measurement and monitoring function of quality assurance for determining how well health care is delivered in comparison with applicable standards or acceptable bounds of care”. (23)

Quality Standard:

“A set of specific, concise statements and related measures that describe what high-quality care looks like across various dimensions of quality, including patient safety, clinical effectiveness and patient experience. They act as markers of high-quality, cost-effective patient care across a clinical condition or care pathway, enable benchmarking of healthcare providers, and inform mechanisms that drive best practice (for example: provider accreditation, payment mechanisms). They are derived from the best available evidence such as clinical guidelines, and produced collaboratively with relevant stakeholders, including service users and carers”. (24)

Real World Evidence:

“The concept of Real World Evidence (RWE) has traditionally been defined as the development of evidence using additional data beyond evidence from randomized controlled trials (RCTs). The term arose in the pharma-epidemiology community, highlighting the contrast in the value of evidence developed from real-life clinical practice to that developed from RCTs. The goal is not to replace RCTs, which are considered the gold standard of evidence, but to complement them”. (33)

Safety:

“A judgment of the acceptability of risk (a measure of the probability of an adverse outcome and its severity) associated with using a technology in a given situation, e.g. for a patient with a particular health problem, by a clinician with certain training, or in a specified treatment setting”. (23)
Standard of Care:

“The caution that a reasonable person in similar circumstances would exercise in providing care to a patient. In wider terms, a physician has a duty to exercise the degree of care expected of a minimally competent physician in the same specialty and under the same circumstances”. (34)

Value:

“A cardinal measure of the preference for, or desirability of, a specific level of health status or a specific health outcome, measured under certainty. Also used to give an overall description balancing the positive and negative (costs) of a situation (e.g. value for money)”. (23)

Value for Money:

“Value for Money (VfM) is the term used to assess whether or not an organisation has obtained the maximum benefit from the goods and services it acquires and/or provides, within the resources available to it. It not only measures the cost of goods and services, but also takes account of the mix of quality, cost, resource use, fitness for purpose, timeliness and convenience to judge whether or not, when taken together, they constitute good value”. 
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